

BRAKE**SERVICE DATA**

(2005/11-2006/01)

Stop Light Switch

Stop light switch BR-13	Resistance 1 - 2	Switch pin released	Below 1 Ω
	Resistance 1 - 2	Switch pin pushed in	10 kΩ or higher

Brake Pedal Load Sensing Switch

Brake pedal load sensing switch BC-216	Resistance 1 - 2	Brake pedal depressed	Approx. 1 kΩ
	Resistance 1 - 2	Brake pedal released	Approx. 213 Ω

SS

Brake Pedal

Brake pedal height from dash panel BR-13	184.2 to 194.2 mm (7.252 to 7.646 in.)
Stop light switch clearance BR-13	1.5 to 2.5 mm (0.059 to 0.098 in.)
Brake pedal free play BR-14	1.0 to 6.0 mm (0.039 to 0.236 in.)
Brake pedal reserve distance from dash panel BR-14	See the table below.

Brake Pedal Reserve Distance from Dash Panel

Engine	Seat Type	Specified Condition
2AZ-FE	w/o 3rd seat	More than 95 mm (3.74 in.)
	w/ 3rd seat	More than 120 mm (4.72 in.)

Brake Fluid Level Warning Switch

Brake fluid level warning switch BR-20	Resistance 1 - 2	Float up (Switch OFF)	10 kΩ or higher
	Resistance 1 - 2	Float down (Switch ON)	Below 1 Ω

Brake Booster

Booster push rod and pin head (SST) clearance BR-24	-0.21 to 0 mm (-0.0083 to 0 in.)
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Front Brake

Pad lining thickness BR-42	15-inch disc	Standard	12.0 mm (0.472 in.)
		Minimum	1.0 mm (0.039 in.)
Disc thickness BR-43	15-inch disc	Standard	25.0 mm (0.984 in.)
		Minimum	22.0 mm (0.866 in.)
	16-inch disc	Standard	28.0 mm (1.102 in.)
		Minimum	25.0 mm (0.984 in.)
Disc runout BR-43		Maximum	0.05 mm (0.0020 in.)

Rear Brake

Pad lining thickness BR-57	15-inch disc	Standard	10.5 mm (0.413 in.)
		Minimum	1.0 mm (0.039 in.)
Disc thickness BR-58	15-inch disc	Standard	12.0 mm (0.472 in.)
		Minimum	10.5 mm (0.413 in.)
Disc runout BR-58	15-inch disc	Maximum	0.15 mm (0.0059 in.)
		Maximum	0.15 mm (0.0059 in.)

SERVICE DATA

(2006/01-)

Stop Light Switch

Stop light switch BR-13	Resistance 1 - 2	Switch pin released	Below 1 Ω
	Resistance 1 - 2	Switch pin pushed in	10 kΩ or higher

Brake Pedal Load Sensing Switch

Brake pedal load sensing switch BC-216	Resistance 1 - 2	Brake pedal depressed	Approx. 1 kΩ
	Resistance 1 - 2	Brake pedal released	Approx. 213 Ω

SS

Brake Pedal

Brake pedal height from dash panel BR-15	184.2 to 194.2 mm (7.252 to 7.646 in.)
Stop light switch clearance BR-15	1.5 to 2.5 mm (0.059 to 0.098 in.)
Brake pedal free play BR-15	1.0 to 6.0 mm (0.039 to 0.236 in.)
Brake pedal reserve distance from dash panel BR-16	See the table below.

Brake Pedal Reserve Distance from Dash Panel

Engine	Specified Condition
2AZ-FE (w/o 3rd seat)	More than 95 mm (3.74 in.)
2AZ-FE (w/ 3rd seat)	More than 120 mm (4.72 in.)
2GR-FE	More than 120 mm (4.72 in.)

Brake Fluid Level Warning Switch

Brake fluid level warning switch BR-20	Resistance 1 - 2	Float up (Switch OFF)	10 kΩ or higher
	Resistance 1 - 2	Float down (Switch ON)	Below 1 Ω

Brake Booster

Booster push rod and pin head (SST) clearance BR-24	-0.21 to 0 mm (-0.0083 to 0 in.)
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Front Brake

Pad lining thickness BR-42	Standard	12.0 mm (0.472 in.)	
	Minimum	1.0 mm (0.039 in.)	
Disc thickness BR-43	15-inch disc	Standard	25.0 mm (0.984 in.)
		Minimum	22.0 mm (0.866 in.)
	16-inch disc	Standard	28.0 mm (1.102 in.)
		Minimum	25.0 mm (0.984 in.)
Disc runout BR-43	Maximum	0.05 mm (0.0020 in.)	

Rear Brake

Pad lining thickness BR-57	Standard	10.5 mm (0.413 in.)
	Minimum	1.0 mm (0.039 in.)
Disc thickness BR-58	Standard	12.0 mm (0.472 in.)
	Minimum	10.5 mm (0.413 in.)
Disc runout BR-58	Maximum	0.15 mm (0.0059 in.)

TORQUE SPECIFICATIONS

Brake Pedal

Part tightened	N*m	kgf*cm	ft.*lbf
Brake pedal support x Body	12.7	130	9
Brake pedal support x Instrument panel reinforcement	25	255	18
Stop light switch	1.5 or less	15 or less	13 in.*lbf or less

Brake Master Cylinder

Part tightened	N*m	kgf*cm	ft.*lbf
Brake master cylinder x Brake booster	12.5	127	9
Brake master cylinder x Brake tube (without SST)	15.2	155	11
Brake master cylinder x Brake tube (with SST)	14	144	10

SS

Brake Booster

Part tightened	N*m	kgf*cm	ft.*lbf
Brake booster x Brake pedal support	12.7	130	9
Push rod clevis lock nut	26	265	19

Front Brake

Part tightened	N*m	kgf*cm	ft.*lbf
Bleeder plug	8.3	85	73 in.*lbf
Cylinder mounting x Knuckle	98	999	72
Cylinder x Cylinder mounting	34.3	350	25
Flexible hose x Cylinder	29.4	300	22

Front Brake Flexible Hose

Part tightened	N*m	kgf*cm	ft.*lbf
Flexible hose x Brake cylinder	29.4	300	22
Flexible hose clamp bolt	18.5	189	14
Flexible hose x Brake tube (without SST)	15.2	155	11
Flexible hose x Brake tube (with SST)	14	144	10

Rear Brake

Part tightened	N*m	kgf*cm	ft.*lbf
Bleeder plug	8.3	85	73 in.*lbf
Cylinder mounting x Carrier	88	897	65
Cylinder x Cylinder mounting	26.5	270	20
Flexible hose x Cylinder	30.4	310	22

Rear Brake Flexible Hose

Part tightened	N*m	kgf*cm	ft.*lbf
Flexible hose x Brake cylinder	30.4	310	22
Flexible hose x Brake tube (without SST)	15.2	155	11
Flexible hose x Brake tube (with SST)	14	144	10